Nothing Found

Your search for **+"index class" +"virtual attribute"** did not return any results.

You may want to try an Advanced Search for additional options.

Please review the Quick Tips below or for more information see the Search Tips.

Quick Tips

- Enter your search terms in lower case with a space between the terms.

  ```
  sales offices
  ```

  You can also enter a full question or concept in plain language.

  ```
  Where are the sales offices?
  ```

- Capitalize proper nouns to search for specific people, places, or products.

  ```
  John Colter, Netscape Navigator
  ```

- Enclose a phrase in double quotes to search for that exact phrase.

  ```
  "museum of natural history" "museum of modern art"
  ```

- Narrow your searches by using a + if a search term must appear on a page.

  ```
  museum +art
  ```

- Exclude pages by using a - if a search term must not appear on a page.

  ```
  museum -Paris
  ```

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

```
museum +"natural history" dinosaur -Chicago
```

Terms used **virtual attribute real attribute**

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Relevance scale

1 Hypergraph based reorderings of outer join queries with complex predicates

Gautam Bhargava, Piyush Goel, Bala Iyer

May 1995 **ACM SIGMOD Record , Proceedings of the 1995 ACM SIGMOD international conference on Management of data**, Volume 24 Issue 2

Full text available: pdf(1.06 MB) Additional Information: full citation, abstract, references, citings, index terms

Complex queries containing outer joins are, for the most part, executed by commercial DBMS products in an "as written" manner. Only a very few reorderings of the operations are considered and the benefits of considering comprehensive reordering schemes are not exploited. This is largely due to the fact there are no readily usable results for reordering such operations for relations with

joins, outer joins, and groupby aggregations. Consequently, some of the reorderings with significantly lower cost may be missed. Using hypergraph model and a set of novel identities, we propose a method to reorder a SQL query conta ...

4 Conflict resolution of rules assigning values to virtual attributes

Yannis E. Ioannidis, Timos K. Sellis

June 1989 **ACM SIGMOD Record , Proceedings of the 1989 ACM SIGMOD international conference on Management of data**, Volume 18 Issue 2

Full text available: pdf(1.30 MB) Additional Information: full citation, abstract, references, citings, index terms

In the majority of research work done on logic programming and deductive databases, it is assumed that the set of rules defined by the user is consistent, i.e., that no contradictory facts can be inferred by the rules. In this paper, we address the problem of resolving conflicts of rules that assign values to virtual attributes. We devise a general framework for the study of the problem, and we propose an approach that subsumes all previously suggested solutions. Moreover, ...

5 Visual software development using an object-relationship model

Kenneth Messa, Bogdan Czejdo

April 1999 **Proceedings of the 37th annual Southeast regional conference (CD-ROM)**

Full text available: pdf(151.66 KB) Additional Information: full citation, index terms

6 Metadata management in federated multimedia systems

Mark Roantree

January 2002 **Australian Computer Science Communications , Proceedings of the thirteenth Australasian conference on Database technologies - Volume 5**, Volume 24 Issue 2

Full text available: pdf(1.00 MB) Additional Information: full citation, abstract, references, citings, index terms

A Federated Information System requires that multiple (often heterogenous) information systems are integrated to the extent that they can share data through views. One issue faced during the construction of federated view schemata is the continuous need to extract metadata from cooperating systems. This is more pressing in the case of federated multimedia systems where needless transfer of large binary objects affects system performance. Where participating systems employ an object-oriented comm ...

Keywords: ODMG, federated databases, interoperability, metadata, object-oriented databases

7 View generation based on equivalence framework in object-oriented multidatabase systems

Kan-Sheng Shi, Hong-Jun Lu

April 1994 **Proceedings of the 1994 ACM symposium on Applied computing**

Full text available: pdf(501.08 KB) Additional Information: full citation, references, index terms

Keywords: conflict resolution, multidatabase, object-oriented view, schema integration, visualization

8

A framework for supporting data integration using the materialized and virtual approaches

Richard Hull, Gang Zhou

June 1996 **ACM SIGMOD Record , Proceedings of the 1996 ACM SIGMOD international conference on Management of data**, Volume 25 Issue 2

Full text available: pdf(1.38 MB) Additional Information: full citation, abstract, references, citings, index terms

This paper presents a framework for data integration currently under development in the Squirrel project. The framework is based on a special class of mediators, called *Squirrel integration mediators.* These mediators can support the traditional virtual and materialized approaches, and also hybrids of them.In the Squirrel mediators, a relation in the integrated view can be supported as (a) fully materialized, (b) fully virtual, or (c) partially materialized (i.e., with some attributes mate ...

9 Objects and views

Serge Abiteboul, Anthony Bonner

April 1991 **ACM SIGMOD Record , Proceedings of the 1991 ACM SIGMOD international conference on Management of data**, Volume 20 Issue 2

Full text available: pdf(1.15 MB) Additional Information: full citation, references, citings, index terms

10 Indexing medical reports in a multimedia environment: the RIME experimental approach

C. Berrut, Y. Chiaramella

May 1989 **ACM SIGIR Forum , Proceedings of the 12th annual international ACM SIGIR conference on Research and development in information retrieval**, Volume 23 Issue 1-2

Full text available: pdf(1.57 MB) Additional Information: full citation, abstract, references, citings, index terms

This paper focuses on the RIME system aimed to the indexing of medical reports in a multimedia environment. This particular application is viewed as representative of a large set of still unanswered needs of large communities of users: domain experts dealing with on-line specialized documentation such as software engineers, medical specialists and so on. In this application textual information appears as an interesting media to access related pictures in the data base. After the pre ...

11 Multidatabase systems: Classifying approaches to semantic heterogeneity in multidatabase systems

Jianchun Zhang

November 1992 **Proceedings of the 1992 conference of the Centre for Advanced Studies on Collaborative research - Volume 2**

Full text available: pdf(1.18 MB) Additional Information: full citation, abstract, references

A multidatabase system (MDBS) is a collection of preexisting database systems that are autonomous and possibly heterogeneous. The MDBS has developed because of a need to manage and retrieve data from multiple databases within a single application. In this paper, a classification of multidatabases, their corresponding architectures, and their methods for dealing with heterogeneity are proposed. Through the detailed examples, we argue that the methodologies used multidatabase systems to solve sche ...

12 A globalizing transformation for attribute grammars

K. J. Räihä, Jorma Tarhio

July 1986 **ACM SIGPLAN Notices , Proceedings of the 1986 SIGPLAN symposium on Compiler contruction**, Volume 21 Issue 7

Full text available: pdf(1.01 MB) Additional Information: full citation, abstract, references, index terms

A transformation is presented for replacing conventional local attribute references in attribute grammars by upward remote references. The purpose of the transformation is to enhance readability of the grammar and to facilitate easy storage optimization.

13 An object-oriented approach to database system implementation

A. James Baroody, David J. DeWitt

December 1981 **ACM Transactions on Database Systems (TODS)**, Volume 6 Issue 4

Full text available: pdf(1.93 MB) Additional Information: full citation, abstract, references, citings, index terms

This paper examines object-oriented programming as an implementation technique for database systems. The object-oriented approach encapsulates the representations of database entities and relationships with the procedures that manipulate them. To achieve this, we first define abstractions of the modeling constructs of the data model that describe their common properties and behavior. Then we represent the entity types and relationship types in the conceptual schema and the internal schema b ...

Keywords: data independence, data manipulation routines, database systems, high-level languages, object-oriented programming, procedural binding

14 Virtual classes: a powerful mechanism in object-oriented programming

O. L. Madsen, B. Moller-Pedersen

September 1989 **ACM SIGPLAN Notices , Conference proceedings on Object-oriented programming systems, languages and applications**, Volume 24 Issue 10

Full text available: pdf(1.01 MB) Additional Information: full citation, abstract, references, citings, index terms

The notions of class, subclass and virtual procedure are fairly well understood and recognized as some of the key concepts in object-oriented programming. The possibility of modifying a virtual procedure in a subclass is a powerful technique for specializing the general properties of the superclass. In most object-oriented languages, the attributes of an object may be references to objects and (virtual) procedures. In Simula and BETA it is also possible to have class attributes. ...

15 Interoperability of multiple autonomous databases

Witold Litwin, Leo Mark, Nick Roussopoulos

September 1990 **ACM Computing Surveys (CSUR)**, Volume 22 Issue 3

Full text available: pdf(2.66 MB) Additional Information: full citation, abstract, references, citings, index terms, review

Database systems were a solution to the problem of shared access to heterogeneous files created by multiple autonomous applications in a centralized environment. To make data usage easier, the files were replaced by a globally integrated database. To a large extent, the idea was successful, and many databases are now accessible through local and long-haul networks. Unavoidably, users now need shared access to multiple autonomous databases. The question is what the corresponding methodology ...

16 Extensibility in Simula 67

Jean D. Ichbiah

September 1971 **ACM SIGPLAN Notices , Proceedings of the international symposium on Extensible languages**, Volume 6 Issue 12

Full text available: pdf(112.47 KB) Additional Information: full citation, abstract, references, index terms

Simula 67 is a general purpose language developed at the Norwegian Computing Center. It

evolved from an earlier simultation language called Simula 1 [1] Dahl and Nygaard however, realized that the problems that had to be solved for the implementation of a simulation language, namely the handling of complex data structures and of quasi-parallelism, were general problems. The language Simula 67 [2,3] was therefore defined as a general purpose language with a mechanism for extension ...

17 EXACT: an extensible approach to active object-oriented databases

Oscar Díaz, Arturo Jaime

November 1997 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 6 Issue 4

Full text available: pdf(149.60 KB) Additional Information: full citation, abstract, index terms

Active database management systems (DBMSs) are a fast-growing area of research, mainly due to the large number of applications which can benefit from this active dimension. These applications are far from being homogeneous, requiring different kinds of functionalities. However, most of the active DBMSs described in the literature only provide a *fixed, hard-wired* execution model to support the active dimension. In object-oriented DBMSs, event-condition-action rules have been propo sed for ...

Keywords: Active DBMS, Extensibility, Metaclasses, Object-Oriented DBMS

18 A structured approach for the definition of the semantics of active databases

Piero Fraternali, Letizia Tanca

December 1995 **ACM Transactions on Database Systems (TODS)**, Volume 20 Issue 4

Full text available: pdf(4.15 MB) Additional Information: full citation, abstract, references, citings, index terms, review

Active DBMSs couple database technology with rule-based programming to achieve the capability of reaction to database (and possibly external) stimuli, called events. The reactive capabilities of active databases are useful for a wide spectrum of applications, including security, view materialization, integrity checking and enforcement, or heterogeneous database integration, which makes this technology very promising for the near future. An active database system consists of ...

Keywords: active database systems, database rule processing, events, fixpoint semantics, rules, semantics

19 On the role of language constructs for framework design

Görel Hedin, Jørgen Lindskov Knudsen

March 2000 **ACM Computing Surveys (CSUR)**

Full text available: pdf(37.97 KB) Additional Information: full citation, references, index terms

20 Expressing and optimizing sequence queries in database systems

Reza Sadri, Carlo Zaniolo, Amir Zarkesh, Jafar Adibi

June 2004 **ACM Transactions on Database Systems (TODS)**, Volume 29 Issue 2

Full text available: pdf(427.23 KB) Additional Information: full citation, abstract, references, index terms

The need to search for complex and recurring patterns in database sequences is shared by many applications. In this paper, we investigate the design and optimization of a query language capable of expressing and supporting efficiently the search for complex sequential patterns in database systems. Thus, we first introduce SQL-TS, an extension of SQL to express these patterns, and then we study how to optimize the queries for this language.

We take the optimal text search algorithm of Knuth, Morr ...

Keywords: Time series, query optimization, searching, sequences

Results 1 - 20 of 26 Result page: **1** 2 next

Terms used **virtual attribute real attribute** Found **3** of **138,663**

Sort results by: relevance
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Results 1 - 3 of 3

Relevance scale

1 Hypergraph based reorderings of outer join queries with complex predicates
Gautam Bhargava, Piyush Goel, Bala Iyer
May 1995 **ACM SIGMOD Record , Proceedings of the 1995 ACM SIGMOD international conference on Management of data**, Volume 24 Issue 2
Full text available: pdf(1.06 MB) Additional Information: full citation, abstract, references, citings, index terms

Complex queries containing outer joins are, for the most part, executed by commercial DBMS products in an "as written" manner. Only a very few reorderings of the operations are considered and the benefits of considering comprehensive reordering schemes are not exploited. This is largely due to the fact there are no readily usable results for reordering such operations for relations with *duplicates* and/or outer join predicates that are other than "*simple.*" Most previous approaches h ...

2 No regression algorithm for the enumeration of projections in SQL queries with joins and outer joins
Gautam Bhargava, Piyush Goel, Balakrishna R. Iyer
November 1995 **Proceedings of the 1995 conference of the Centre for Advanced Studies on Collaborative research**
Full text available: pdf(314.80 KB) Additional Information: full citation, abstract, references, citings, index terms

The execution time of an SQL query can be reduced significantly by considering different schedules for the operations specified in the query. The benefits of considering different schedules, a hallmark of strength in query optimization, are not usually exploited if a query contains projections along with binary operations. This paper presents a set of "no regression" algorithms that are capable of generating different schedules for the queries containing projections and binary operations.

3 SQL query optimization: reordering for a general class of queries
Piyush Goel, Bala Iyer
June 1996 **ACM SIGMOD Record , Proceedings of the 1996 ACM SIGMOD international conference on Management of data**, Volume 25 Issue 2
Full text available: pdf(943.71 KB) Additional Information: full citation, abstract, references, citings, index terms

The strength of commercial query optimizers like DB2 comes from their ability to select an optimal order by generating all equivalent reorderings of binary operators. However, there are no known methods to generate all equivalent reorderings for a SQL query containing joins, outer joins, and groupby aggregations. Consequently, some of the reorderings with significantly lower cost may be missed. Using hypergraph model and a set of novel identities, we propose a method to reorder a SQL query conta ...

Nothing Found

Your search for **+"index class" +"folder"** did not return any results.

You may want to try an Advanced Search for additional options.

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- Capitalize proper nouns to search for specific people, places, or products.

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  John Colter, Netscape Navigator
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- Narrow your searches by using a + if a search term must appear on a page.

  ```
  museum +art
  ```

- Exclude pages by using a - if a search term must not appear on a page.

  ```
  museum -Paris
  ```

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

```
museum +"natural history" dinosaur -Chicago
```

Terms used **index class attribute** Found **17** of **138,663**

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Search Tips
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Results 1 - 17 of 17

Relevance scale

1 Research directions in object-oriented database systems
Won Kim
April 1990 **Proceedings of the ninth ACM SIGACT-SIGMOD-SIGART symposium on Principles of database systems**
Full text available: pdf(2.02 MB) Additional Information: full citation, abstract, references, citings, index terms

The set of object-oriented concepts found in object-oriented programming languages forms a good basis for a data model for post-relational database systems which will extend the domain of database applications beyond conventional business data processing. However, despite the high level of research and development activities during the past several years, there is no standard object-oriented data model, and criticisms and concerns about the field still remain. In this paper, I will first pr ...

2 An NF2 relational interface for document retrieval, restructuring and aggregation
Kalervo Järvelin, Timo Niemi
July 1995 **Proceedings of the 18th annual international ACM SIGIR conference on Research and development in information retrieval**
Full text available: pdf(985.40 KB) Additional Information: full citation, references, index terms

3 Hierarchical materialisation of methods in object-oriented views: design, maintenance, and experimental evaluation
Bartosz Bębel, Robert Wrembel
November 2001 **Proceedings of the 4th ACM international workshop on Data warehousing and OLAP**
Full text available: pdf(3.02 MB) Additional Information: full citation, abstract, references, index terms

The application of materialised object-oriented views in object-relational data warehousing systems is promising. In this paper we propose a novel technique for the materialisation of method results in object-oriented views, called *hierarchical materialisation*. When an object used to materialise the result of method *m* is updated, then *m* has to be recomputed. This recomputation can use unaffected intermediate materialised results of methods called from *m*, thus reducing ...

Keywords: method materialisation, object-oriented view, object-relational data warehouse, view materialisation

4 Index nesting – an efficient approach to indexing in object-oriented databases

Beng Chin Ooi, Jiawei Han, Hongjun Lu, Kian Lee Tan

August 1996 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 5 Issue 3

Full text available: pdf(455.77 KB) Additional Information: full citation, abstract, index terms

In object-oriented database systems where the concept of the superclass-subclass is supported, an instance of a subclass is also an instance of its superclass. Consequently, the access scope of a query against a class in general includes the access scope of all its subclasses, unless specified otherwise. An index to support superclass-subclass relationship efficiently must provide efficient associative retrievals of objects from a single class or from several classes in a class hierarchy. This p ...

Keywords: Indexing structures, OODB, Query retrieval

5 H-trees: a dynamic associative search index for OODB

Chee Chin Low, Beng Chin Ooi, Hongjun Lu

June 1992 **ACM SIGMOD Record , Proceedings of the 1992 ACM SIGMOD international conference on Management of data**, Volume 21 Issue 2

Full text available: pdf(1.06 MB) Additional Information: full citation, abstract, references, citings, index terms

The support of the superclass-subclass concept in object-oriented databases (OODB) makes an instance of a subclass also an instance of its superclass. As a result, the access scope of a query against a class in general includes the access scope of all its subclasses, unless specified otherwise. To support the superclass-subclass relationship efficiently, the index must achieve two objectives. First, the index must support efficient retrieval of instances from a single class. Second, it must ...

6 Information structures for processing and retrieving

Robert A. Colilla, Burnett H. Sams

January 1962 **Communications of the ACM**, Volume 5 Issue 1

Full text available: pdf(770.16 KB) Additional Information: full citation, references, citings

7 A configurable type hierarchy index for OODB

Thomas A. Mueck, Martin L. Polaschek

November 1997 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 6 Issue 4

Full text available: pdf(411.47 KB) Additional Information: full citation, abstract, citings, index terms

With respect to the specific requirements of advanced OODB applications, index data structures for type hierarchies in OODBMS have to provide efficient support for multiattribute queries and have to allow index optimization for a particular query profile. We describe the *multikey type index* and an efficient implementation of this indexing scheme. It meets both requirements: in addition to its multiattribute query capabilities it is designed as a mediator between two standard design altern ...

Keywords: Access methods, Indexing, Multiple inheritance, OODB, Type hierarchies

8 OODB indexing by class-division

Sridhar Ramaswamy, Paris C. Kanellakis

May 1995 **ACM SIGMOD Record , Proceedings of the 1995 ACM SIGMOD international**

conference on Management of data, Volume 24 Issue 2

Full text available: pdf(1.27 MB) Additional Information: full citation, abstract, references, citings, index terms

Indexing a class hierarchy, in order to efficiently search or update the objects of a class according to a (range of) value(s) of an attribute, impacts OODB performance heavily. For this indexing problem, most systems use the class hierarchy index (CH) technique of [15] implemented using B^+-trees. Other techniques, such as those of [14, 18,31], can lead to improved average-case performance but involve the implementation of new data-structures. As a special form of external dynamic two ...

9 Types and persistence in database programming languages

Malcolm P. Atkinson, O. Peter Buneman

June 1987 **ACM Computing Surveys (CSUR)**, Volume 19 Issue 2

Full text available: pdf(7.91 MB) Additional Information: full citation, abstract, references, citings, index terms, review

Traditionally, the interface between a programming language and a database has either been through a set of relatively low-level subroutine calls, or it has required some form of embedding of one language in another. Recently, the necessity of integrating database and programming language techniques has received some long-overdue recognition. In response, a number of attempts have been made to construct programming languages with completely integrated database management systems. These lang ...

10 Data organization and retrieval on parallel air channels: performance and energy issues

J. Juran, A. R. Hurson, N. Vijaykrishnan, Soontae Kim

March 2004 **Wireless Networks**, Volume 10 Issue 2

Full text available: pdf(238.18 KB) Additional Information: full citation, abstract, references, index terms

Our interest in the global information sharing process is motivated by the advances in communication and computation technologies, the marriage between the two technologies, and the almost limitless amount of information available on the network. Within the scope of the global information sharing process, when a user's request (potentially mobile) is directed to public data, broadcasting has been suggested as an effective mechanism to access data. The effectiveness of the schemes to retrieve pub ...

Keywords: access latency, energy awareness, global information system, indexing, mobile devices, scheduling, wireless communication

11 Path caching (extended abstract): a technique for optimal external searching

Sridhar Ramaswamy, Sairam Subramanian

May 1994 **Proceedings of the thirteenth ACM SIGACT-SIGMOD-SIGART symposium on Principles of database systems**

Full text available: pdf(1.16 MB) Additional Information: full citation, abstract, references, citings, index terms

External 2-dimensional searching is a fundamental problem with many applications in relational, object-oriented, spatial, and temporal databases. For example, interval intersection can be reduced to 2-sided, 2-dimensional searching and indexing class hierarchies of objects to 3-sided, 2-dimensional searching. Path caching is a new technique that can be used to transform a number of time/space efficient data structures for internal 2-dimensional searching (such as segment tr ...

12 Completeness and predicate-based abstract interpretation

Alan Mycroft

August 1993 **Proceedings of the 1993 ACM SIGPLAN symposium on Partial evaluation and semantics-based program manipulation**

Full text available: pdf(800.09 KB) Additional Information: full citation, abstract, references, citings, index terms

Traditionally, the theory of abstract interpretation has concentrated on the study of when one interpretation is sound (also safe or correct) with respect to another. We consider the dual notion of when one interpretation is complete with respect to another. Under the usual formulation of abstract interpretation, undecidability in general implies that a finitely computable sound abstraction of the standard interpretation is ...

13 Modelling software process change for cooperative work

Y. Sun

April 1994 **Proceedings of the 1994 ACM symposium on Applied computing**

Full text available: pdf(531.56 KB) Additional Information: full citation, references, index terms

Keywords: Petri net, change, cooperation, object-oriented method

14 Towards comprehensive database support for geoscientific raster data

Norbert Widmann, Peter Baumann

November 1997 **Proceedings of the fifth ACM international workshop on Advances in geographic information systems**

Full text available: pdf(602.08 KB) Additional Information: full citation, references, index terms

15 Method precomputation in object-oriented databases

Elisa Bertino

October 1991 **ACM SIGOIS Bulletin , Conference proceedings on Organizational computing systems**, Volume 12 Issue 2-3

Full text available: pdf(982.38 KB) Additional Information: full citation, references, citings, index terms

16 DRAGOON: a tool for the Ada programmer

Stephen J. Goldsack, Colin Atkinson

December 1991 **Proceedings of the conference on TRI-Ada '91: today's accomplishments; tomorrow's expectations**

Full text available: pdf(1.17 MB) Additional Information: full citation, references, citings, index terms

17 Design of reusable IR framework

Gabriele Sonnenberger, Hans-Peter Frei

July 1995 **Proceedings of the 18th annual international ACM SIGIR conference on Research and development in information retrieval**

Full text available: pdf(939.32 KB) Additional Information: full citation, references, citings, index terms

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